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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/665,745 | 09/22/2003 | Hiroyuki Matsushima | 243019US2 | 6827 |
| 22850 7590 12/17/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | EXAMINER DENNISON, JERRY B | |
| | | | ART UNIT | PAPER NUMBER |
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| | | | 12/17/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/665,745

Applicant(s)

MATSUSHIMA, HIROYUKI

Examiner

JERRY DENNISON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 92-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 92-97 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to the Amendment for Application Number 10/665,745 received on 11/12/2008.
2. Claims 92-97 are presented for examination.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/12/2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 92-97 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 92 recites the limitation "the other communication apparatus" in the first limitation of the claim. There is insufficient antecedent basis for this limitation in the claim. Examiner suggests using language such as "first" and "second" to distinguish between the communication apparatuses.

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5. Claim 92 recites the limitation "the operation response" twice in the fourth limitations of the claim. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 92 includes the limitation, "an acquisition unit configured to acquire the operation response associated with the first operation request from the first storage unit, the current status of the operation response corresponding to the processed status in the status storage unit." It is unclear to Examiner whether the acquisition unit acquires the current status (i.e. it is unclear if what was meant to be claimed was "to acquire the operation response...from the first storage unit and the current status..."). The same applies to the "current status of the second operation request." The reason it is unclear to Examiner as to whether the acquisition unit acquires this status information is as follows. Assuming the intention of the claim was to acquire the status information, there is nothing in the claim that explains how this status information is used functionally. Assuming the intention of the claim was not to acquire the status information, there is no bearing as to why the status information is even recited in the claim as it does not relate to any of the other limitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 7,149,813) in view of Broad et al. (US 20040003057).

8. Regarding claim 92, Flanagan disclosed a system and method for synchronizing devices in which a protocol is used which avoids the latencies of multiple acknowledgements by grouping requests and responses to previous requests together in one message (Flanagan, col. 1, line 65 through col. 2, line 5). Flanagan disclosed that either device/apparatus may begin the synchronization (Flanagan, col. 2, lines 7-10). Flanagan disclosed that the protocol allows responses to updates to be grouped together and sent with grouped requests to update objects, thereby allowing one message to both report errors and send, request, and respond to updates, with an overall outcome of reducing latency and bandwidth required (Flanagan, col. 2, lines 14-20). Flanagan disclosed an exemplary protocol to include XML which allows multiple commands and responses to be grouped together in one message (Flanagan, col. 3, lines 39-45, 50-55). Flanagan disclosed many tags that may be nested within the XML message, including commands, responses, and status (Flanagan, col. 5, lines 30-40). Flanagan explicitly disclosed the status tag pair, which may be used to enclose data relating to the success or failure of a requested operation (Flanagan, col. 11, lines 53-60) as well as provides examples of different status (Flanagan, col. 12, lines 5-28). Flanagan also disclosed both devices in communication including storage (Flanagan, col. 13, lines 20-35, storage of computing device; col. 14, lines 25-40, storage at mobile device), and a synchronization application residing on the mobile device being programmed to

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interact with a corresponding synchronization application resident on the host computer to keep the information stored in the storage synchronized with corresponding information stored at the host computer (Flanagin, col. 14, lines 40-46). Therefore, both devices have the means for generating, transmitting, receiving, and storing requests (including operations/commands) and responses, either separately or in batches, as well as executing the operations/commands/function calls and producing a status.

While Flanagin disclosed providing status information regarding requests as well as a means for storing status, Flanagin did not explicitly state storing specific status information indicating which of not-processed status, presently-processing state, and processed status as a current status of the requests.

Broad disclosed storing a log that includes status information regarding client requests (Broad, [0013]), the different types of status including status such as “completed”, “pending” and “processing” (Broad, [0032]) and updating this log to reflect the current status of the request (Broad, [0033]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the status log of Broad into the teachings of Flanagin in order to yield the predictable result of maintaining a synchronization log that keeps track of requests and allow the system to provide different status information regarding such requests, thereby creating a more efficient synchronization system that enable both ends to keep track of the status of their requests.

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9. Regarding claim 93, Flanagan and Broad disclosed the limitations as described in claim 92, including a request processing unit configured to search the first storage unit for the first operation request, the current status of the first operation request corresponding to the not-processed status, cause a module corresponding to an operation associated with the first operation request to perform the operation associated with the first operation request and modify the current status of the first operation request to the presently-processing status (Broad, [0033]). See motivation above.

10. Regarding claim 95, Flanagan and Broad disclosed the limitations as described in claim 92, including wherein the first operation request and the second operation request each correspond to a function call; and the first operation response and a second operation response to the second operation request each correspond to an execution result of a function called by the function call (Flanagan, col. 6, lines 45-55).

11. Claims 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan and Broad and further in view of Leach et al. (US 6108715).

12. Regarding claim 94, Flanagan and Broad disclosed the limitations as described in claim 93. Flanagan and Broad further disclosed providing their services for a plurality of clients (Broad, [0007]). However, Flanagan and Broad did not explicitly state wherein a plurality of the request processing units perform respective operations in multiple threads concurrently.

Leach disclosed that computer systems have operating systems that support multitasking, i.e. allowing multiple processes to execute concurrently (Leach, col. 1, lines 24-34).

Since the combination of Flanagan and Broad disclosed servicing multiple clients, it would have been obvious to one of ordinary skill in the art to have the system invoke multiple concurrent processes in order to handle the plurality of clients at once instance in order to obtain the predictable result of being able to service the multiple clients at once without the clients having to wait their turn, thereby providing a more efficient system that is more desirable to use by its customers.

13. Claims 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 7,149,813) in view of Broad et al. (US 20040003057) and further in view of Svensson et al. (US 2003/0125063).

14. Regarding claim 96, Flanagan and Broad disclosed the limitations as described in claim 92. Flanagan also disclosed using XML over HTTP to send the commands and responses (Flanagan, col. 15, lines 10-15, 30-40, 45-60).

FOLDDOC defines the SOAP protocol to be a minimal set of conventions for invoking code using XML over HTTP.

While Flanagan disclosed using XML over HTTP to send the commands and responses, Flanagan did not explicitly state using SOAP as the protocol.

Since Flanagan disclosed using XML over HTTP, it would have been obvious to one of ordinary skill in the art to use the SOAP protocol as such is a well known protocol for communication with mobile devices.

In an analogous art, Svensson disclosed peer-to-peer communications within a mobile network which includes synchronizing a mobile client with a host computer using the SOAP protocol (Svensson, [0030]-[0031]).

One of ordinary skill would have been motivated to combine the teachings of Flanagan and Broad with Svensson since the teachings relate to synchronizing mobile devices with a host computer and are therefore clearly within the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate using the SOAP protocol within the teachings of Flanagan and Broad in order to implement a system that can be used across a well known standard protocol thereby expanding its customer base and increasing desirability to use the system.

15. Claim 97 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan and Broad and further in view of Mukundan et al. (US 2007/0016639).

16. Regarding claims 42, 63, 84, 91, Flanagan and Broad disclosed the limitations as described in claims 16, 40, 62, 82.

Flanagan and Svensson did not explicitly state assigning priority information to the requests and generating responses according to the priority information.

In an analogous art, Mukundan disclosed a way of managing requests in a client server environment in which responses are performed based on priorities of the requests (Mukundan, [0530]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate assigning priorities to requests and processing these requests based on priority information into the combination of Flanagin and Broad in order to better inform the client as to the status of processing the request ([0531]).

Response to Amendment

Applicant's arguments and amendments filed on 11/12/2008 have been carefully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., *by incorporating new limitations into the independent claims, which will require further search and consideration*) to the claims which significantly affected the scope thereof.

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jerry Dennison/
Examiner, Art Unit 2443